

<b>As of:</b> 8/7/15 3:12 PM <b>Received:</b> July 29, 2015 <b>Status:</b> Pending_Post <b>Tracking No.</b> 1jz-8k9e-vyph <b>Comments Due:</b> September 08, 2015 <b>Submission Type:</b> Web
--

# PUBLIC SUBMISSION

**Docket:** NRC-2015-0057

Linear No-Threshold Model and Standards for Protection Against Radiation

**Comment On:** NRC-2015-0057-0010

Linear No-Threshold Model and Standards for Protection Against Radiation; Notice of Docketing and Request for Comment

**Document:** NRC-2015-0057-DRAFT-0088

Comment on FR Doc # 2015-15441

## Submitter Information

**Name:** Chris Bergan

## General Comment

This is my personal response to the NRC's request for comments on Docket ID NRC-2015-0057: Linear No-Threshold Model and Standards for Protection Against Radiation.

I am in favor of abandoning what I call the LNT fallacy and revising current standards to reflect radiological hormesis. Whether to implement As High As Reasonably Safe (AHARS) or As High As Naturally Existent (AHANE) or simply to use a threshold (minimally x5 of current regulations); NRC standards should reflect actual verifiable facts. As Low as Reasonably Achievable (ALARA) is an outdated standard which, when originally implemented, was politically expedient for those not involved with the nuclear industry.

Some early workers in the nuclear industry had contempt for the reason-less standards connected to LNT. Galen Winsor was one such person who had been promoted to being a safety director for nuclear facilities. In public talks he showed how little respect he had for LNT standards. <https://youtu.be/UEMKHi5YWGw>

Another person of note is Dr. Edward Calabrese, an expert trained in biological toxicity and who has extended his research to radiological effects upon living cells. He is not only a strong advocate for hormesis, but in trying to understand the current ALARA model has become something of a historian. Dr. Calabrese found within original documents that Nobel recipient Dr. Hermann J. Muller deliberately misled his peers on the truth of a radiological threshold. <https://youtu.be/6g4U0D3S798>

I will also add a quote from Dr. Calabrese: "I wanted to validate the hormetic model, and test it's frequency in the population. So how did the govt & the scientific community validate the threshold model? I'll just copy that... and maybe I'll do it right. So I looked, and I looked.... and guess what? I never found that any

government, any scientist, any industry, any expert committee ever - ever - published a paper in which they attempted to or showed validation of the threshold model for making accurate predictions below the threshold. Never. And we live below the threshold." <https://youtu.be/fokmHSukJ1Y?t=40m44s>

Finally I would like to include the published thoughts from the Encyclical Letter Laudato Si of The Holy Father Francis On Care For Our Common Home. In the 184th paragraph (Chapter 5) he writes; Some projects, if insufficiently studied, can profoundly affect the quality of life of an area due to very different factors such as unforeseen noise pollution, the shrinking of visual horizons, the loss of cultural values, or the effects of nuclear energy use. The culture of consumerism, which prioritizes short-term gain and private interest, can make it easy to rubber-stamp authorizations or to conceal information.

The radiological effects of nuclear energy has certainly been neglected as a subject of study. This has affected not only energy production, but medical, pharmacological, agricultural, and industrial uses creating unnecessary regulatory ratcheting which only increases costs which are eventually born by the public. The public has enough worries and stresses. Frankly, I would doubt the voracity of anyone claiming that the nuclear industry offers our culture short-term gains only. It's time to end the rubber-stamp ratcheting of ALARA upon the nuclear industry and implement the truthful information of hormesis.

Thank you for this opportunity to convey my opinion on the subject. Respectfully,  
Chris Bergan, Iowa City